

Digital Health Modernization/

Medical Records (MHV to VA.gov)

(Q4 2023) |

Version 1

Revision History

|  |  |  |  |
| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| 5/03/2024 | 2 | Product update | Lichelle Bain |
| 8/14/2023 | 1 | Product debut | Amelia Hacking |

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1. Product Overview

Medical Records on VA.gov will provide Veterans with the same ability to securely review their medical records that exists on My HealtheVet (MHV) today. Veterans will be able to view, print, or download their records as a list or a group, but can also view, print, and download individual records, like a single blood panel. Veterans will be able to opt in and out of VHIE sharing settings, manage their notification settings, and download a comprehensive report of all of their records contained within this tool. The new application will employ modern technology and user-centered design to ensure that the tool is accessible, straightforward, and simple to use, and Veterans will have an easier time accessing their important information. Moving this product out of My HealtheVet and into the VA.gov landscape will also provide a more seamless and consistent experience than was possible on two distinct websites.

1.1 Assumptions / Standards

To maintain consistency across Medical Records, there are some approaches that are used throughout the experience to note.

Device Responsiveness

The entire experience is mobile responsive, meaning that as it is viewed on small factor devices (tablets and phones) the elements will shrink to provide users with an optimal mobile-friendly experience (Figure 1).

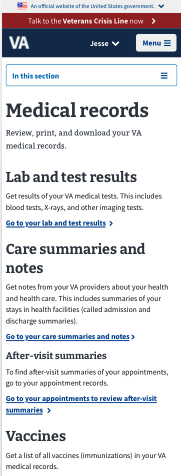
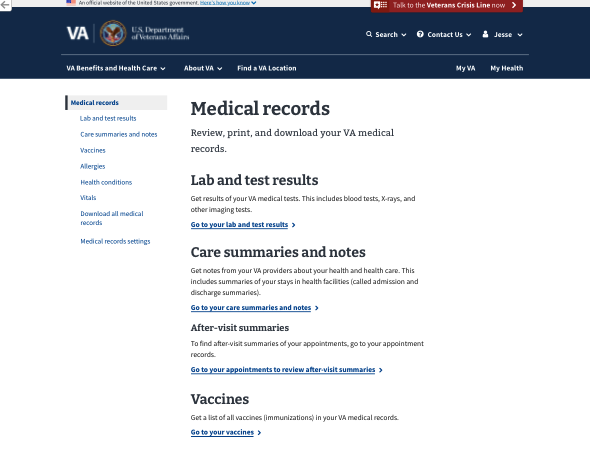


Figure 1: Desktop and mobile landing pages

Accessibility Guidelines

Medical records on VA.gov is committed to upholding all accessibility guidelines. This tool and its features are designed to be easily perceived, operated, understood, and robust, regardless of how they are accessed or the user's physical, cognitive, or technological abilities. The design and development process has involved close collaboration with accessibility specialists to guarantee that this product fulfills all accessibility standards.

Alerts

Alerts also appear within the Medical Records tool. We use them to inform the Veteran about successful actions or empty records sections. These are some of the alerts that appear within Medical Records as needed:

|  |  |
| --- | --- |
| **Download started**  This alert lets the Veteran know the download has started, but the system needs verification of the device’s download location for the file (Figure 2). | Figure 2: Download started alert |
| **Successful download**  This alert lets the Veteran know that their records were successfully downloaded. We provide this positive feedback to decrease confusion and prevent Veterans from downloading something multiple times because they aren’t sure if it worked the first time or not (Figure 3). | A close-up of a computer screen  Description automatically generated  Figure 3: Successful download alert |
| **Sharing settings successfully updated**  This alert tells Veterans that their sharing settings were successfully changed. This is important feedback, because the ability to update these settings is an essential part of Veterans’ ownership of their medical records (Figure 4). | A close-up of a green rectangle  Description automatically generated  Figure 4: Sharing settings successfully updated alert |
| **No records in domain**  If a Veteran has no records in a certain section of Medical Records (example: lab and test results), this alert will appear in place of the list of records. This informational alert can help Veterans understand why a certain section of the Medical Records tool may be empty (Figure 5). | Figure 5: No records in domain alert |

1.2 Print and Download

The ability to print and download medical records is an essential and important part of the Veteran’s experience throughout the Medical Records tool. On various pages, Veterans will be presented with a new print/download button, allowing them to print the list or record they are viewing, or download it as a PDF or text file, depending on their needs (Figure 6).

There are two use cases for this button: **Downloading/printing a single medical record** – a specific individual record of a domain found within the details page of a record, e.g., a flu vaccine; and **downloading/printing a list** of a particular domain, e.g., all vaccines available in the patient’s record.

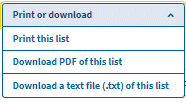


Figure 6: Print or download button

On the “Download all medical records” page, Veterans are presented with two links – one to download their entire medical record as a PDF, and one to download it as a text file (Figure 7). We included the file size in our designs so that Veterans are not surprised by the large file sizes.



Figure 7: Print or download links

1.3 What is Not Included in Medical Records

* Self-entered data will not appear in the new Medical Records tool. In Phase 0, users will be directed back to MHV Classic to view and add self-entered data. In the future, they may be able to access historic data.
* Care summaries and notes prior to 2013 will not appear within this tool.
* EKGs after March 2022 are not viewable through this tool. EKGs prior to March 2022 are only viewable as the date the EKG was performed, but results and imaging are not available.
* Medications are not part of this Medical Records tool, but will be available in a different part of MHV on VA.gov.
* After-visit summaries are not included in Medical Records, but can instead be found in the Appointments section of VA.gov.

2. User Access

In the initial release (Phase 0), functionality will not be linked directly to VA.gov. Specific pilot/beta users will be invited to use the experience and their account emails will be ‘whitelisted’ which will allow them entry into the new experience.

Users that are invited to the new experience will need to authenticate into VA.gov and then navigate directly to the URL they will be provided. They, along with other non-invited users, can still access their legacy/existing MHV Medical Records experience by following the links in VA.gov.

2.1 Login Methods

Invited users will be provided the URL to the new experience, which can be accessed by going to <https://www.va.gov/my-health/medical-records/>. Upon accessing this URL, users will have the ability to login using one of the existing VA.gov login options (Figure 8).

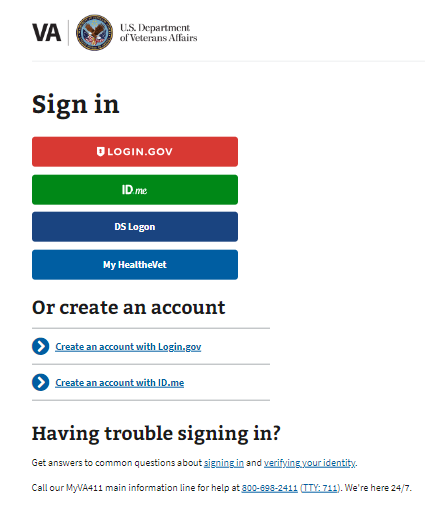


Figure 8: Logging into VA.gov

Unauthorized users will be redirected to this static page <https://staging.va.gov/health-care/medical-records/>

3. Navigation

To navigate around Medical Records on VA.gov, Veterans are provided with several different navigation techniques.

|  |  |
| --- | --- |
| 3.1 Left Navigation (as seen in Figure 9) | |
| * **Medical records** serves as the landing page. * **Lab and test results** is where Veterans can access results of their medical tests and lab.   + - **Care summaries and notes** is where Veterans can get notes from their VA providers about their health care.     - **Vaccines** is where Veterans can get records of which vaccines they have received and when. * **Allergies** is where Veterans can review their documented allergies.   + - **Health conditions** is where Veterans can review a list of health conditions that their VA providers are helping them manage.     - **Vitals** is where Veterans can review their basic health numbers that their providers check at appointments.     - **Download all medical** records is where Veterans can download all their records as a single file.     - **Medical records settings** allow Veterans to view and change their medical records sharing and notification settings. | Figure 9: Left navigation |

3.2 Breadcrumbs

Throughout the Medical Records experience, we have provided a back breadcrumb to help Veterans navigate through the experience more easily (Figure 9). They will appear on every page, except the Medical records landing page. The breadcrumb will take Veterans back to the previous level of the navigation menu.

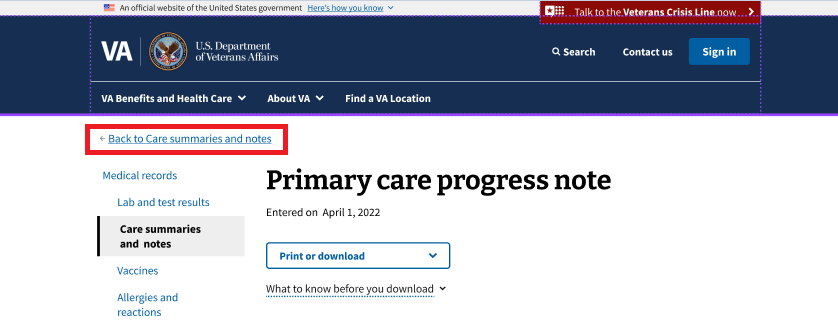


Figure 10: Back breadcrumbs

3.3 Pagination

There are several uses of list views throughout the Medical Records experience. It is possible for a single section of Medical Records to contain hundreds of records, and so pagination is used to separate those records into shorter, more manageable lists to decrease the cognitive load and increase usability for Veterans. At the top of the list, we tell Veterans how many records are currently being displayed, how many records total we have, and that they are automatically sorted from newest to oldest (Figure 11). At the bottom of the list, we have page numbers and a next button that lets Veterans navigate through the rest of their records (Figure 12).



Figure 11: Top of pagination

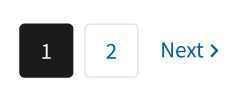


Figure 12: Bottom of pagination

4. Functionality

Users of Medical Records can navigate throughout the experience using the aforementioned navigation patterns. Below is a description of the various types of functionalities that users can perform while authenticated.

4.1 Landing page

The Medical Records landing page acts as a home base for Veterans to help them understand what exists in the medical records tool for them to use. There are two major sections: an explanation of the different navigation options (Figure 13), and a Q&A section that reviews some common questions that Veterans may have about using this tool (Figure 14).

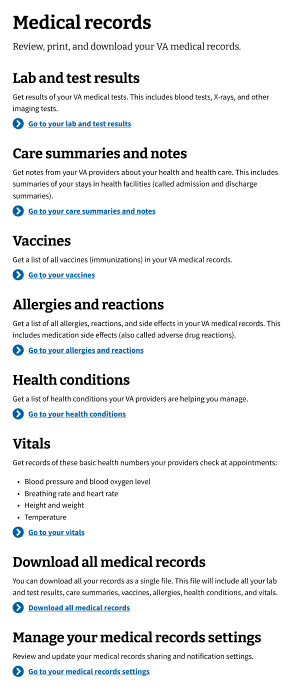


Figure 13: Landing page navigation descriptions

Figure 14: Landing page question and answers

4.2 Lab and test results

The lab and test results page allows Veterans to review results from their medical labs and tests, such as blood tests, x-rays, and other imaging tests (Figure 15). The page includes an explanation of when Veterans can expect to find their results here, to decrease confusion about why a recently-done test or lab may not be available to view. The pagination makes it clear that records are sorted from newest to oldest, and then the different tests are displayed in a card format with basic information about the test, including the name of the lab or test, date of the lab test, type of lab or test, and the name of the provider who ordered the lab or test, with a link that will take Veterans to a different page to view the detailed results of their lab or test.

The detailed view includes the option for Veterans to print or download their lab or test result, and then displays important information again such as the type of test, sample tested, ordering provider, as well as the ordering and collecting locations and any lab comments that are applicable. Many lab and test results include a results and a reference range for results that defines what is considered to be a “normal” result, and so we have included an informational alert that lets Veterans know that if their results are outside of the standard range, this is not immediate need for concern and they should contact their provider if they need help interpreting their results to understand what they mean for their individual circumstance and condition (Figure 16).

|  |  |
| --- | --- |
| Figure 15: Lab and test results header and card view |  |

Figure 16: Detailed view of a chemistry and hematology test

4.3 Care summaries and notes

The care summaries and notes page allows Veterans to view notes about their care that their providers have entered (Figure 17). Veterans can view primary care progress notes, admission and discharge summaries, non-VA care consult notes, and administrative notes. Notes entered before 2013 and after-visit summaries will not appear in this list. Notes will appear in a card format, like the other list pages throughout medical records. Cards will display the type of note, the date of the note, the location of the facility that wrote the note, the admitting or signing physician as applicable, with a link that will take Veterans to a different page to view the detailed results of their care summary or note.

The detailed view includes the option for Veterans to print or download the note, and then displays important information again such as the location, any applicable dates, the signing or admitting physician, as well as the status of the note. Then the actual note is displayed in the format that the provider has entered it (Figure 18).

**A screenshot of a medical document

Description automatically generated with low confidenceA picture containing text, screenshot, font

Description automatically generated**

Figure 17: Care summaries and notes header and card view

Figure 18: Details view of an admission and discharge summary

4.4 Vaccines

The vaccines page allows Veterans to view a list of every vaccine they receive and have the option to print or download the list of all of their vaccines (Figure 19). Vaccines are displayed in the previously discussed card format, and show the vaccine short name, the date the vaccine was received, and the location at which they received the vaccine, with a link that will take Veterans to a different page to view the details of the vaccine.

The detailed view includes the option to print or download the individual vaccine record, as well as important details including the manufacturer, location, and any reaction or notes that the provider has included (Figure 20).

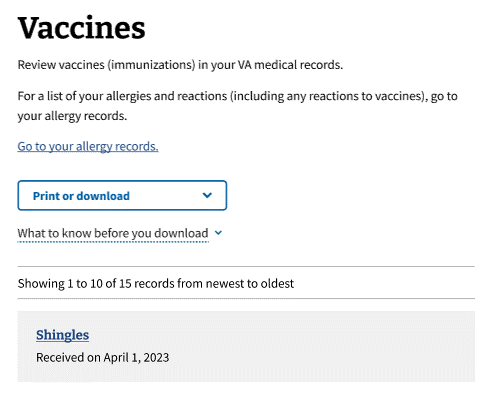


Figure 19: Vaccines header and card view

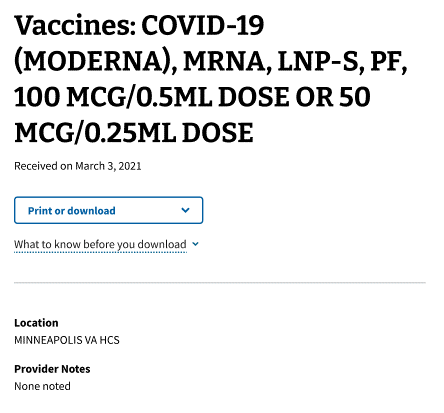


Figure 20: Vaccine details view

4.5 Allergies and reactions

The allergies page allows Veterans to view a list of all their recorded allergies (Figure 21). This list only includes allergies entered in by VA providers and does not include any self-entered allergies. If Veterans wish to add an allergy to their list, they may send a secure message to their care team through the link that we provide on this page, or by accessing the secure messaging portion of MHV. Veterans can download or print the list of their allergies. Any allergies are displayed in cards, and list the title, date entered, and a link to view the allergy in detail.

In the detailed view, Veterans can also download or print the report. Important details of the allergy are displayed, including the reaction to the allergen, the type of allergy, the drug class (if it’s a drug-related allergy), as well as the location of the provider who entered it, whether this allergy was directly observed by a care team member or only reported, and then any notes that the provider has entered (Figure 22).

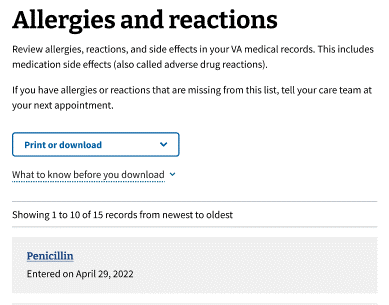


Figure 21: Allergies header and card view

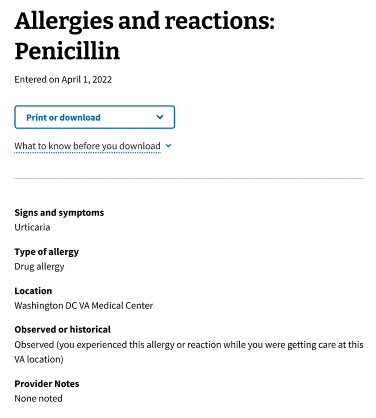
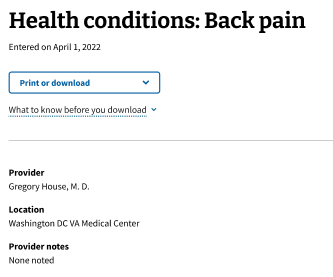


Figure 22: Allergy details view

4.6 Health conditions

The health conditions page gives Veterans access to a list of their recorded health conditions that their VA providers are helping them manage (Figure 23). Health conditions are displayed in card format with the name of the health condition, the date entered, and a link to take Veterans to a page that displays the condition in more detail.

The detailed view includes an option to print or download this report. It also displays information about the health condition including the provider that entered the condition, any provider notes, the status of the health condition, the location of the facility, and the clinical term for their condition (Figure 24).



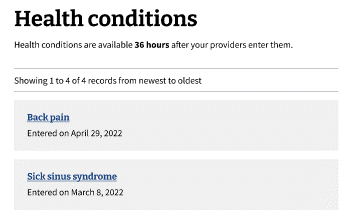


Figure 23: Health conditions header and card view

Figure 24: Health condition details view

4.7 Vitals

The vitals page allows Veterans to view their vitals (Figure 25). It is different from the other list views, because it displays a set list of vitals with the most recent reading. The vitals listed are:

* Blood pressure
* Heart rate
* Breathing rate
* Blood oxygen level
* Pain level
* Temperature
* Weight and
* Height

Each vital is listed in a card with the name of the vital, the result, the date of the last reading, and the location of the facility that recorded it. Then there is a link that Veterans can click that will take them to a new page to view all of their records within that vital (Figure 26).

The detailed results can be printed or downloaded, and then are displayed from newest to oldest. The date, measurement, location, and provider notes are displayed for each reading.



Figure 25: Vitals header and card view

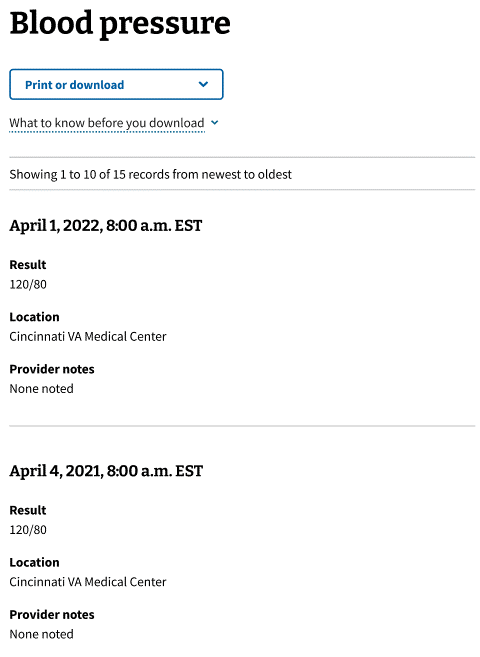


Figure 26: Vitals - View results over time

4.8 Download all medical records

The ‘Download all medical records’ page allows Veterans to download all of the medical records within this tool as a single file using VA Blue Button (Figure 27).

The download includes lab and test results, care summaries and notes (only from 2013 or later), vaccines, allergies, health conditions, and vitals.

On this page, there are two download links: one to download the file as a PDF, and one to download it as a text file.

There are also some informational sections about what Veterans should know before they download, and what to do if they can’t find all their medical records.

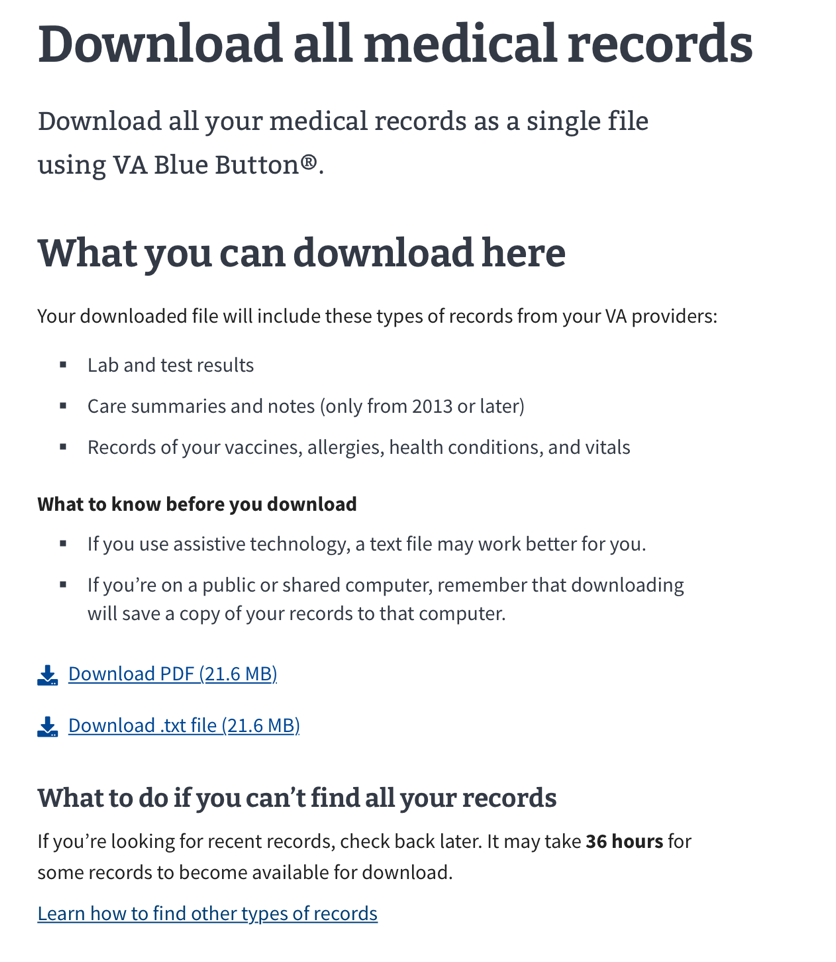
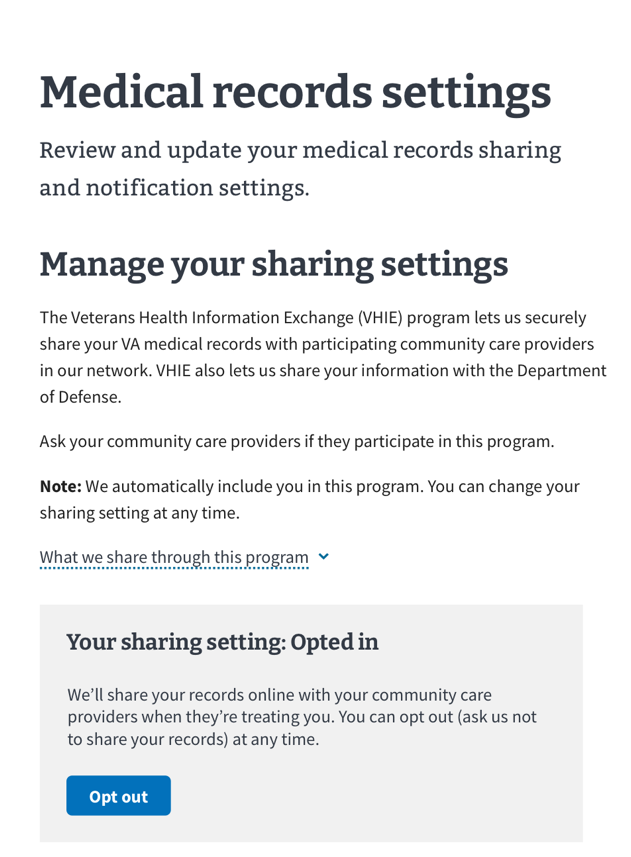


Figure 27: Download all your medical records header and details

4.9 Medical records settings

The ‘Medical records settings’ page allows Veterans to view and update their sharing settings and explains notification settings with a link to update those on the My HealtheVet website (Figure 28).

Figure 28: Manage your sharing settings



The sharing settings are the “Veterans Health Information Exchange program” (VHIE) and Veterans can opt in or out. On this page, we provide an explanation of what VHIE is, as well as what records are shared through that program. Veterans are automatically enrolled but can opt out at any time. We wanted to make the opt in/out process as easy as we could to increase usability for Veterans and empower them to understand what happens with their medical records. When Veterans select the opt in/out button, a modal opens up explaining what their decision will mean, and Veterans can confirm or cancel their decision (Figure 29). We also made it very clear whether a Veteran is opted in or out to decrease any confusion for Veterans about what was happening.

To manage their notification settings, Veterans will have to navigate to their profile. We provided a link directly to their profile to make that process easier as well (Figure 30).

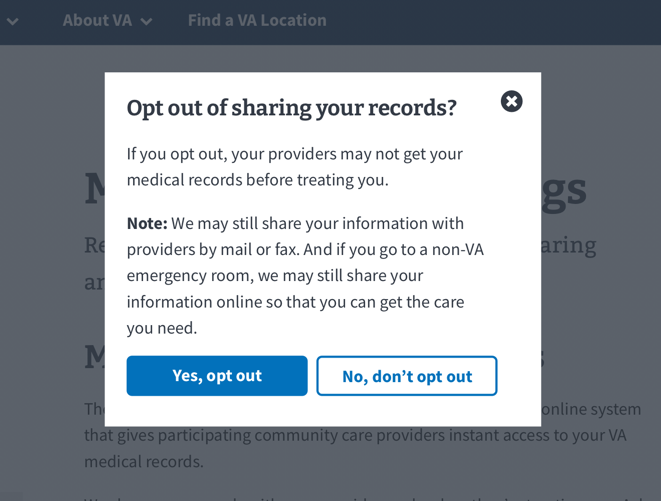


Figure 29: Opt out modal

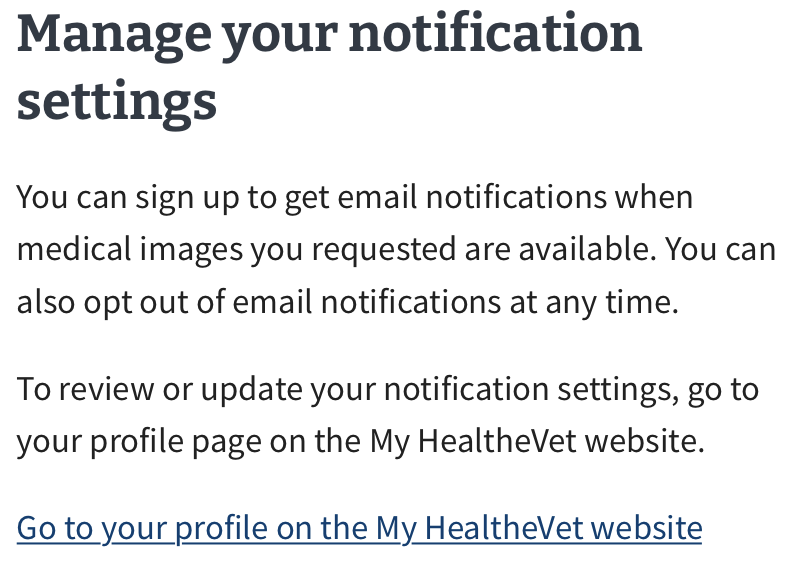


Figure 30: Manage your notification settings

5. Major Issues and Error Messages

Error handling exists throughout the application. When a user completes a task, if the result does not complete for any reason, they are presented with an error message. These are some of the error messages built into Medical Records that will display as needed:

|  |  |
| --- | --- |
| **Can’t download records**  This error message will display when there is an internal error preventing the Veteran from downloading their medical records (Figure 31). | Figure 31: Can’t download records error |
| **Can’t display records**  This error message will display if there is an internal error preventing a Veteran’s records from being displayed within a domain (Figure 32). | Figure 32: Can’t display records error |
| **Error updating sharing settings**  These error messages will display after a Veteran attempts to update their sharing settings but is unable to for an internal reason (Figure 33). | **A screenshot of a chat  Description automatically generated**  Figure 33: Error updating sharing settings |
| **Error accessing sharing settings**  If there is an internal error that prevents the sharing settings from being accessed, this will display in place of the sharing settings box (Figure 34). | A screenshot of a phone  Description automatically generated  Figure 34: Error accessing sharing settings |

6. Table of Figures

There is not a table of figures documented at this time.